

141/02527 A01

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Applicant:** D. MENDLOVIC, et al.  
**Serial Number:** Not Yet Assigned  
**Filed:** PCT/IL01/00398 filed May 3, 2001 and Herewith as a US National Phase  
**Title:** OPTICAL LINEAR PROCESSOR  
**Art Unit:** Not Yet Assigned  
**Examiner:** Not Yet Assigned

Honorable Commissioner of Patents and Trademarks  
Washington DC 20231

**PRELIMINARY AMENDMENT**

Further to the concurrent filing of the U.S. national stage of PCT/IL01/00398, kindly amend the application as follows prior to examination:

**IN THE SPECIFICATION**

Kindly add the following section, on page 1, immediately after the title:

**--RELATED APPLICATIONS**

The present application is a US national application of PCT/IL01/00398, filed on May 3, 2001.--

**IN THE CLAIMS**

Please replace pending claims 4, 8, 12-13, 15-17, 19-28, 32, 35, 38-41, 43 and 45 with the following amended claims in clean form:

4. (Amended) An optical processor according to claim 2 wherein all the modulation zones in a same column of modulation zones are illuminated by light from a same light source.
8. (Amended) An optical processor according to claim 5 wherein efficiency of light transfer between a light source and a light detector for light at a wavelength that characterizes light provided by the light sources is less than a predetermined threshold efficiency  $\epsilon$  that satisfies a relation  $\epsilon^2 \leq 4/(N^3 \times \text{SNR})$  where N is a number of the plurality of light sources and SNR is a desired signal to noise ratio resulting from crosstalk.